

IN THE CLAIMS

Please amend the claims as follows:

Claims 1-8 (Canceled).

Claim 9 (Currently Amended): An article comprising a layer and a substrate, wherein the layer is obtained by a sintering treatment of an aqueous dispersion that has been applied to a substrate, the dispersion containing a silicon/titanium mixed oxide powder prepared by flame hydrolysis and the titanium dioxide content of the powder ranges from 2 to 20 wt.% wherein the thickness of the layer ranges from 1 μm to 1 mm .

Claim 10 (Canceled).

Claim 11 (Previously Presented): The article as claimed in claim 9, wherein the thickness of the layer ranges from 1 μm to 50 μm .

Claim 12 (Previously Presented): The article as claimed in claim 9, wherein the thickness of the layer ranges from 5 μm to 15 μm .

Claim 13 (Previously Presented): The article as claimed in claim 9, wherein the BET surface area of the powder ranges from 5 to 500 m^2/g .

Claim 14-15 (Canceled).

Claim 16 (Previously Presented): The article as claimed in claim 9, wherein the substrate is selected from the group consisting of borosilicate glass, silica glass, glass ceramic, and a material with a very low coefficient of expansion.

Claim 17 (Previously Presented): The article as claimed in claim 9, further comprising less than 0.5 wt.% of impurities.

Claim 18 (Withdrawn): A process for preparing an article as claimed in claim 9, comprising applying a dispersion containing a silicon/titanium mixed oxide powder to a substrate, and thermal treatment sintering the dispersion applied to the substrate to form a layer.

Claim 19 (Withdrawn): The process as claimed in claim 18, further comprising preparing the dispersion by flame hydrolyzing a silicon/titanium mixed oxide powder, wherein the proportion of powder ranges from 0.1 to 60 wt.% in the dispersion.

Claim 20 (Withdrawn): A method comprising coating a material comprising forming a layer by thermal treating an aqueous dispersion that has been applied to said material, the dispersion containing a silicon/titanium mixed oxide powder prepared by flame hydrolysis and the titanium dioxide content of the powder ranges from 2 to 20 wt.%. and wherein said material is selected from the group consisting of an ultra-low expansion material a photocatalytic material, a self-cleaning mirror, a superhydrophilic constituent, a lens, a container for a gas and a container for a liquid.

Claim 21 (Previously Presented): An article comprising a layer and a substrate, wherein the layer is obtained by thermal treatment of an aqueous dispersion that has been applied to a substrate, the dispersion containing a silicon/titanium mixed oxide powder prepared by flame hydrolysis and wherein said silicon/titanium mixed oxide powder is a mixture of powders comprising at least one powder having a BET surface area of at least 130 m²/g and at least one powder having a BET surface area of at most 90 m²/g, wherein the ratio by weight of the powders with a lower BET to the powders with a higher BET surface area ranges from 40:60 to 99.5:0.5.

Claim 22 (Previously Presented): The article as claimed in claim 21, wherein the thickness of the layer ranges from 100 nm to 1 mm.

Claim 23 (Previously Presented): The article as claimed in claim 21, wherein the thickness of the layer ranges from 1 μm to 50 μm.

Claim 24 (Previously Presented): The article as claimed in claim 21, wherein the thickness of the layer ranges from 5 μm to 15 μm.

Claim 25 (Previously Presented): The article as claimed in claim 21, wherein the BET surface area of the powder ranges from 5 to 500 m²/g.

Claim 26 (Previously Presented): The article as claimed in claim 21, wherein said silicon/titanium mixed oxide powder is a mixture of powders comprising at least one powder having a BET surface area of at least 170 m²/g and at least one powder having a BET surface

area of at most $70 \text{ m}^2/\text{g}$, wherein the ratio by weight of the powders with a lower BET to the powders with a higher BET surface area ranges from 40:60 to 99.5:0.5.

Claim 27 (Previously Presented): The article as claimed in claim 21, wherein the titanium dioxide content of the powder ranges from 0.1 to 99.9 wt.%.

Claim 28 (Previously Presented): The article as claimed in claim 21, wherein the titanium dioxide content of the powder ranges from 2 to 20 wt.%.

Claim 29 (Previously Presented): The article as claimed in claim 21, wherein the substrate is selected from the group consisting of borosilicate glass, silica glass, glass ceramic, and a material with a very low coefficient of expansion.

Claim 30 (Previously Presented): The article as claimed in claim 21, further comprising less than 0.5 wt.% of impurities.

Claim 31 (Withdrawn): A process for preparing an article as claimed in claim 21, comprising applying a dispersion containing a silicon/titanium mixed oxide powder to a substrate, and thermal treatment sintering the dispersion applied to the substrate to form a layer.

Claim 32 (Withdrawn): The process as claimed in claim 31, further comprising preparing the dispersion by flame hydrolyzing a silicon/titanium mixed oxide powder, wherein the proportion of powder ranges from 0.1 to 60 wt.% in the dispersion.

Claim 33 (Withdrawn): A method comprising coating a material comprising forming a layer by thermal treating an aqueous dispersion that has been applied to said material, the dispersion containing a silicon/titanium mixed oxide powder prepared by flame hydrolysis and wherein said silicon/titanium mixed oxide powder is a mixture of powders comprising at least one powder having a BET surface area of at least $130 \text{ m}^2/\text{g}$ and at least one powder having a BET surface area of at most $90 \text{ m}^2/\text{g}$, wherein the ratio by weight of the powders with a lower BET to the powders with a higher BET surface area ranges from 40:60 to 99.5:0.5 and wherein said material is selected from the group consisting of an ultra-low expansion material a photocatalytic material, a self-cleaning mirror, a superhydrophilic constituent, a lens, a container for a gas and a container for a liquid.

Claim 34 (Previously Presented): The article as claimed in claim 26, wherein the titanium dioxide content of the powder ranges from 2 to 20 wt.%.

DISCUSSIONS OF THE AMENDMENTS

Claims 1-8, 14 and 15 were previously canceled.

Claim 9 is currently amended.

Claim 10 is canceled.

Claims 11-13, 16, 17, 21-30 and 34 were previously presented.

Claims 18-20 and 31-33 are withdrawn.

The amendment to Claim 9 is supported by previously presented Claims 10 and 11.

Upon entry of the amendment Claims 9, 11-13 and 16-24 will be pending with Claims 9, 11-13, 16, 17, 21-30 and 34 under active consideration.